

FEMA-REP-14  
September 1991

**RADIOLOGICAL EMERGENCY PREPAREDNESS**  
**EXERCISE MANUAL**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

## **A. INTRODUCTION**

## A. INTRODUCTION

This final Radiological Emergency Preparedness (REP) Exercise Manual is intended for use by Federal Emergency Management Agency (FEMA) staff responsible for planning, preparing, and evaluating REP exercises and other Federal staff who assist FEMA as members of Regional Assistance Committees (RAC). It is a companion to the REP Exercise Evaluation Methodology (EEM), FEMA-REP-15, which is used by FEMA and other Federal agencies to document the performance of offsite response organizations (ORO) participating in REP Program exercises. For purposes of this Manual, ORO refers to State and local governments, licensee offsite response organizations, and other supporting organizations. This guidance is issued to improve the conduct of exercises and promote greater uniformity in the evaluation of exercises among FEMA Regions.

FEMA has provided guidance to interpret and apply the planning standards and evaluation criteria through FEMA guidance memoranda (GM) and FEMA REP-series documents. This Manual incorporates and supersedes guidance contained in previously issued GMs that pertain to the REP program, exercises and drills. This Manual supersedes GM EX-1, GM EX-2, and GM EX-3. To the extent that it is programmatically possible, FEMA intends to issue future guidance that pertains exclusively to the REP exercise program as amendments to this Manual. All GMs containing integrated guidance on planning and preparedness and exercise activities will remain in effect.

### Manual Scope and Contents

Sections B, C, and D of the Manual provide relevant information, guidance, and documentation pertaining to REP exercises.

Section B provides an overview of the regulatory basis for the REP exercise program.

Section C provides a description of guidance for generic exercise tasks that encompass all essential pre-, trans-, and post-exercise activities of the REP exercise program.

Section D provides a uniform interpretation and application of guidance in NUREG-0654 to 33 objectives contained in the EEM. For each objective, this Manual provides:

- o statement of intent
- o demonstration criteria with explanations and extent-of-play provisions
- o clarification of terms

Section E provides guidance on different types of drills, including medical emergency drills.

Section F is a Glossary that defines terms used in the Manual. These terms are also defined in the Clarification of Terms sections of each objective in Section D of the Manual. This duplication is intentional because Section D is designed to be used as a stand-alone document in REP Program exercises in support of the EEM.

This Manual is issued in loose-leaf form, with dated pages, to facilitate periodic up-dating.

## **ABBREVIATIONS AND ACRONYMS**

AMA	-	American Medical Association
ANI	-	American Nuclear Insurers
ARC	-	American Red Cross
ARCA	-	area(s) requiring corrective action
ARFI	-	area(s) recommended for improvement
ACP	-	access control point(s)
CFR	-	Code of Federal Regulations
cpm	-	counts per minute
DHHS	-	U.S. Department of Health and Human Services
DOE	-	U.S. Department of Energy
EBS	-	Emergency Broadcast System
ECL	-	emergency classification level(s)
EOC	-	emergency operations center(s)
EOF	-	emergency operations facility(ies)
EPA	-	U.S. Environmental Protection Agency
EPZ	-	emergency planning zone(s)
ETA	-	estimated time(s) of arrival
ETE	-	evacuation time estimate(s)
FR	-	Federal Register
FDA	-	U.S. Food and Drug Administration

## **ABBREVIATIONS AND ACRONYMS (continued)**

FEMA -	Federal Emergency Management Agency
FTC	- Field Team Coordinator(s)
Ft/min -	feet per minute
Ft <sup>3</sup> /min	- cubic feet per minute
GE	- General Emergency
Ge(Li) -	lithium drifted germanium
GM	- guidance memorandum (a)
JIC	- Joint Information Center(s)
JPIC	- Joint Public Information Center(s)
KI	- potassium iodide
mR	- milliroentgen(s)
mR/h	- milliroentgen(s) per hour
NOAA -	National Oceanic and Atmospheric Administration
NOUE -	Notification of Unusual Event
NRC	- U.S. Nuclear Regulatory Commission
NUREG	- NRC documents reference
ORO	- offsite response organization(s)
PA	- public address
PAD	- protective action decision(s)

PAG - protective action guide(s)

### **ABBREVIATIONS AND ACRONYMS (continued)**

PAO	-	Public Affairs Official(s)
PAR	-	protective action recommendation(s)
P.L.	-	Public Law
POR	-	Point(s) Of Review
R	-	Roentgen(s)
RAC	-	Regional Assistance Committee(s)
REA	-	radiological emergency area(s)
REM	-	Roentgen equivalent man
R/h	-	Roentgens per hour
SAE	-	Site Area Emergency
TCP	-	traffic control point(s)
TDD	-	telecommunications device(s) for the deaf
TLD	-	thermoluminescent dosimeter(s)